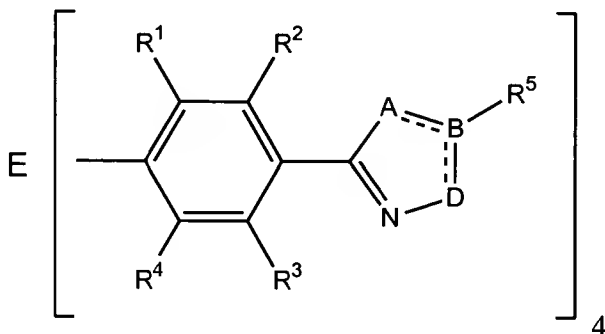


Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A compound of the following formula:



wherein

each of R<sup>1</sup>-R<sup>4</sup> is, independently, H, substituted or unsubstituted C<sub>1-6</sub> alkyl, OH, C<sub>1-6</sub> alkoxy, N(R<sup>6</sup>)(R<sup>7</sup>), in which each of R<sup>6</sup> and R<sup>7</sup> is, independently, H or substituted or unsubstituted C<sub>1-6</sub> alkyl, NO<sub>2</sub>, CN, or CO<sub>2</sub>R<sup>8</sup>, in which R<sup>8</sup> is H or C<sub>1-6</sub> alkyl; and

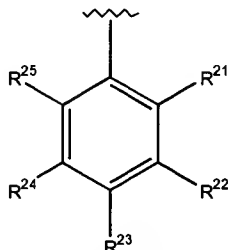
wherein R<sup>5</sup> is H, substituted or unsubstituted C<sub>1-6</sub> alkyl, substituted or unsubstituted C<sub>2-6</sub> alkenyl, substituted or unsubstituted C<sub>2-6</sub> alkynyl, unsubstituted C<sub>6-20</sub> aryl or C<sub>6-20</sub> aryl substituted with OH, C<sub>1-6</sub> alkoxy, N(R<sup>26</sup>)(R<sup>27</sup>), alkylaryl in which the ~~alkyl~~ aryl moiety is substituted with one or more substituted C<sub>1-6</sub> alkyl groups further substituted with hydroxyl, protected hydroxyl, amino, protected amino, carboxy, protected carboxy, alkoxy, halo, CN, or NO<sub>2</sub>, substituted or unsubstituted C<sub>4-20</sub> heteroaryl, C<sub>10-20</sub> diarylaminoaryl, or is absent, or B and D, together with R<sup>5</sup> and R<sup>11</sup>, are substituted or unsubstituted aryl; in which each of R<sup>26</sup> and R<sup>27</sup> is, independently, H, substituted or unsubstituted C<sub>1-6</sub> alkyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylaryl, NO<sub>2</sub>, CN, or CO<sub>2</sub>R<sup>28</sup>, in which R<sup>28</sup> is H or C<sub>1-6</sub> alkyl.

wherein A is O, S, N(R<sup>9</sup>) in which R<sup>9</sup> is absent, H, substituted or unsubstituted alkyl, or substituted or unsubstituted aryl, N=N, or N=C(R<sup>10</sup>) in which the C is adjacent to B and in which R<sup>10</sup> is substituted or unsubstituted alkyl, or substituted or unsubstituted aryl;

wherein B is C or N;  
wherein D is N, NH, or C(R<sup>11</sup>) in which R<sup>11</sup> is substituted or unsubstituted alkyl, or substituted or unsubstituted aryl, or B and D, together with R<sup>5</sup> and R<sup>11</sup> are substituted or unsubstituted aryl;  
and wherein E is C or Si;  
provided that when A is O and D is N, then B is C and the floating double bond is between B and D;  
further provided that when A is N(R<sup>9</sup>) and R<sup>9</sup> is absent, then B is N, R<sup>5</sup> is absent, D is NH, and the floating double bond is between A and B;  
further provided that when A is N=N, then B is C, D is N, and the floating double bond is between B and D;  
further provided that when A is N=C(R<sup>10</sup>), then B is N, R<sup>5</sup> is absent, D is C(R<sup>11</sup>), and the floating double bond is between B and D;  
further provided that when A is N(R<sup>9</sup>) and R<sup>9</sup> is H, alkyl, or aryl, then B is C, D is C(R<sup>11</sup>), and the floating double bond is between B and D;  
further provided that when A is O or S and D is C(R<sup>11</sup>), then B is C and the floating double bond is between B and D.

2. (original) The compound of claim 1, wherein A is O.
3. (original) The compound of claim 2, wherein each of R<sup>1</sup>-R<sup>4</sup> is H.
4. (currently amended) The compound of claim 2, wherein R<sup>5</sup> is unsubstituted C<sub>6-20</sub> aryl or C<sub>6-20</sub> aryl substituted with OH, C<sub>1-6</sub> alkoxy, N(R<sup>26</sup>)(R<sup>27</sup>), or alkylaryl in which the ~~alkyl~~ aryl moiety is substituted with one or more substituted C<sub>1-6</sub> alkyl groups further substituted with hydroxyl, protected hydroxyl, amino, protected amino, carboxy, protected carboxy, alkoxy, halo, CN, or NO<sub>2</sub>; in which each of R<sup>26</sup> and R<sup>27</sup> is, independently, H, substituted or unsubstituted C<sub>1-6</sub> alkyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylaryl, NO<sub>2</sub>, CN, or CO<sub>2</sub>R<sup>28</sup>, in which R<sup>28</sup> is H or C<sub>1-6</sub> alkyl.

5. (currently amended) The compound of claim 4, wherein R<sup>5</sup> has the following formula:



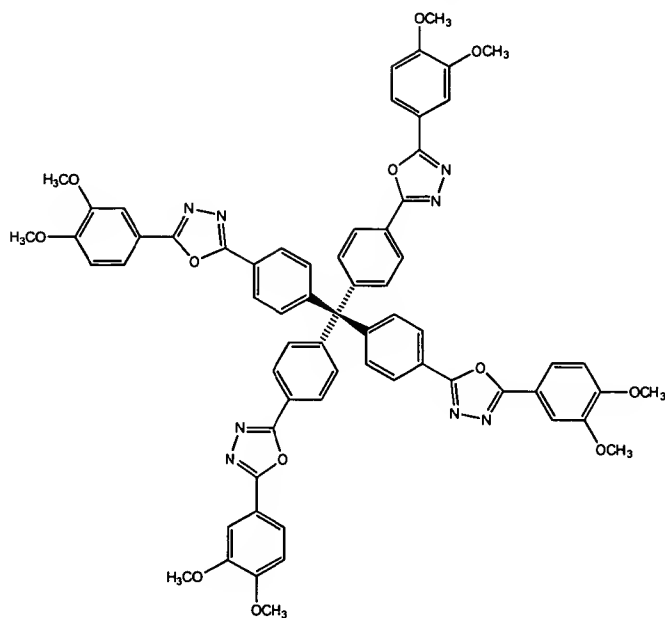
wherein each of R<sup>21</sup>-R<sup>25</sup> is, independently, H, ~~substituted or unsubstituted~~ C<sub>1-6</sub> alkyl groups further substituted with hydroxyl, protected hydroxyl, amino, protected amino, carboxy, protected carboxy, alkoxy, halo, CN, or NO<sub>2</sub>; OH, C<sub>1-6</sub> alkoxy, N(R<sup>26</sup>)(R<sup>27</sup>), in which each of R<sup>26</sup> and R<sup>27</sup> is, independently, H, substituted or unsubstituted C<sub>1-6</sub> alkyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylaryl, NO<sub>2</sub>, CN, or CO<sub>2</sub>R<sup>28</sup>, in which R<sup>28</sup> is H or C<sub>1-6</sub> alkyl.

6. (original) The compound of claim 5, wherein each of R<sup>21</sup>-R<sup>25</sup> is, independently, H or methoxy.

7. (canceled)

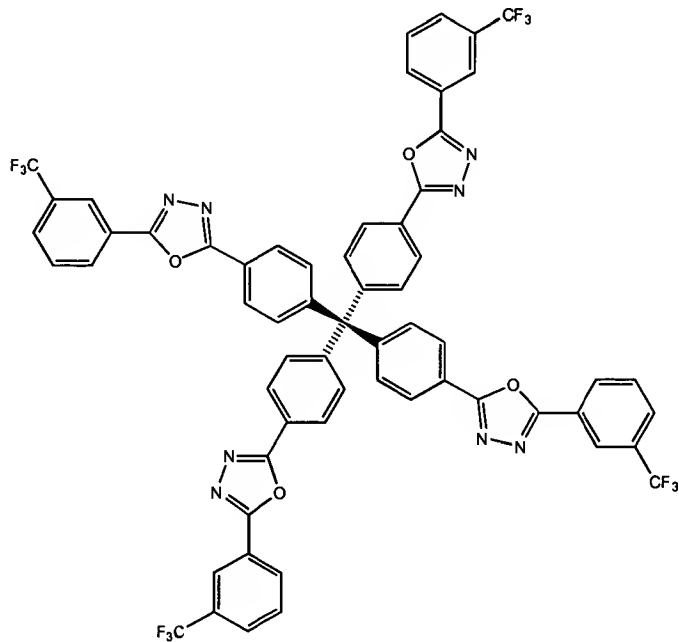
8. (original) The compound of claim 5, wherein each of R<sup>21</sup>-R<sup>25</sup> is, independently, H or trifluoromethyl.

9. (original) The compound of claim 1, wherein the compound has the following formula:

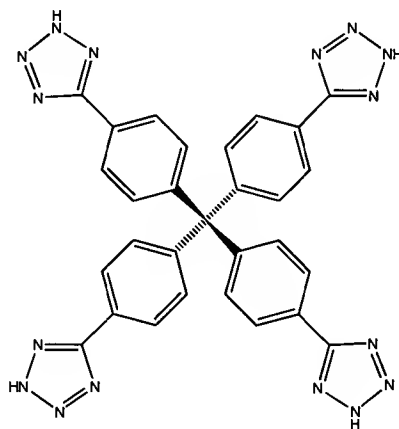


10. (canceled)

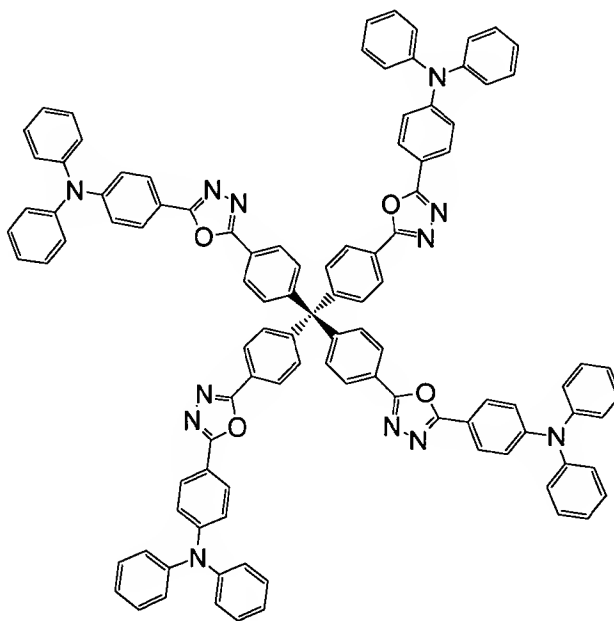
11. (original) The compound of claim 1, wherein the compound has the following formula:



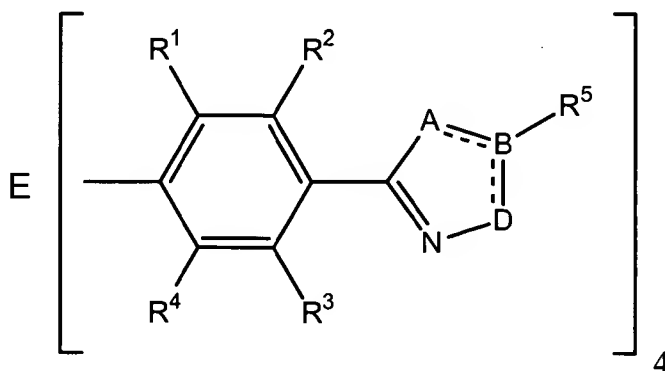
12. (original) The compound of claim 1, wherein A is  $N(R^9)$ , in which  $R^9$  is absent.
13. (original) The compound of claim 12, wherein the compound has the following formula:



14. (original) The compound of claim 1, wherein the compound has the following formula:



15. (currently amended) An electroluminescence device comprising a substrate, a hole transporting layer, an emitting layer, and an electron transporting layer, wherein at least one of the hole transporting layer, the emitting layer, and the electron transporting layer comprises a compound having the following formula:



wherein

each of R<sup>1</sup>-R<sup>4</sup> is, independently, H, substituted or unsubstituted C<sub>1-6</sub> alkyl, OH, C<sub>1-6</sub> alkoxy, N(R<sup>6</sup>)(R<sup>7</sup>), in which each of R<sup>6</sup> and R<sup>7</sup> is, independently, H or substituted or unsubstituted C<sub>1-6</sub> alkyl, NO<sub>2</sub>, CN, or CO<sub>2</sub>R<sup>8</sup>, in which R<sup>8</sup> is H or C<sub>1-6</sub> alkyl; and

wherein R<sup>5</sup> is H, substituted or unsubstituted C<sub>1-6</sub> alkyl, substituted or unsubstituted C<sub>2-6</sub> alkenyl, substituted or unsubstituted C<sub>2-6</sub> alkynyl, unsubstituted C<sub>6-20</sub> aryl or C<sub>6-20</sub> aryl substituted with OH, C<sub>1-6</sub> alkoxy, N(R<sup>26</sup>)(R<sup>27</sup>), alkylaryl in which the ~~alkyl~~ aryl moiety is substituted with one or more substituted C<sub>1-6</sub> alkyl groups further substituted with hydroxyl, protected hydroxyl, amino, protected amino, carboxy, protected carboxy, alkoxy, halo, CN, or NO<sub>2</sub>, substituted or unsubstituted C<sub>4-20</sub> heteroaryl, C<sub>10-20</sub> diarylaminoaryl, or is absent, or B and D, together with R<sup>5</sup> and R<sup>11</sup>, are substituted or unsubstituted aryl; in which each of R<sup>26</sup> and R<sup>27</sup> is, independently, H, substituted or unsubstituted C<sub>1-6</sub> alkyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylaryl, NO<sub>2</sub>, CN, or CO<sub>2</sub>R<sup>28</sup>, in which R<sup>28</sup> is H or C<sub>1-6</sub> alkyl;

wherein A is O, S, N(R<sup>9</sup>) in which R<sup>9</sup> is absent, H, substituted or unsubstituted alkyl, or substituted or unsubstituted aryl, N=N, or N=C(R<sup>10</sup>) in which the C is adjacent to B and in which R<sup>10</sup> is substituted or unsubstituted alkyl, or substituted or unsubstituted aryl;

wherein B is C or N;

wherein D is N, NH, or C(R<sup>11</sup>) in which R<sup>11</sup> is substituted or unsubstituted alkyl, or substituted or unsubstituted aryl, or B and D, together with R<sup>5</sup> and R<sup>11</sup> are substituted or unsubstituted aryl;

and wherein E is C or Si;

provided that when A is O and D is N, then B is C and the floating double bond is between B and D;

further provided that when A is N(R<sup>9</sup>) and R<sup>9</sup> is absent, then B is N, R<sup>5</sup> is absent, D is NH, and the floating double bond is between A and B;

further provided that when A is N=N, then B is C, D is N, and the floating double bond is between B and D;

further provided that when A is N=C(R<sup>10</sup>), then B is N, R<sup>5</sup> is absent, D is C(R<sup>11</sup>), and the floating double bond is between B and D;

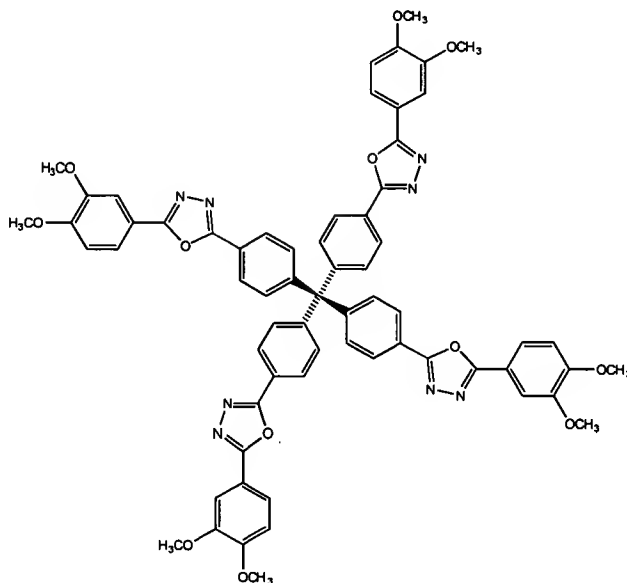
further provided that when A is N(R<sup>9</sup>) and R<sup>9</sup> is H, alkyl, or aryl, then B is C, D is C(R<sup>11</sup>), and the floating double bond is between B and D;

further provided that when A is O or S and D is C(R<sup>11</sup>), then B is C and the floating double bond is between B and D.

16. (original) The device of claim 15, wherein A is O, B is C, and D is N.

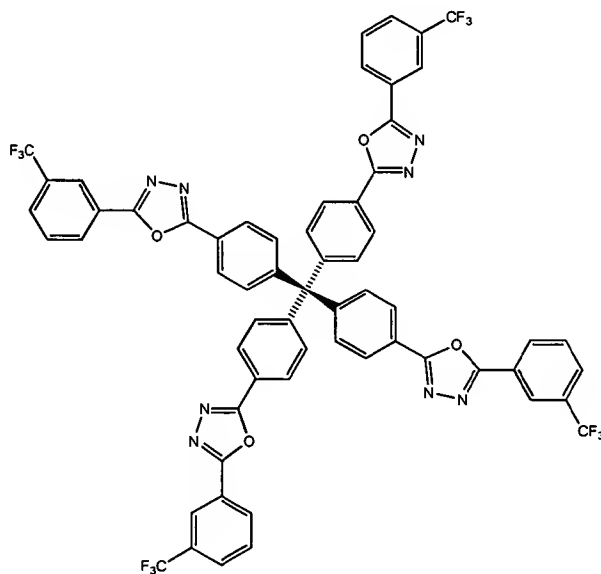
17. (original) The device of claim 16, wherein each of R<sup>1</sup>-R<sup>4</sup> is H.

18. (original) The device of claim 15, wherein the compound has the following formula:



19. (canceled)

20. (original) The device of claim 15, wherein the compound has the following formula:





21. (original) The device of claim 15, wherein the compound has the following formula:

